

Safety Data Sheet

Section 1: Identification of the material and the Supplier

Product identifier	W&H Cleaning Solution MC-1000
Product use	Cleaner for turbines, straight and contra-angle handpieces, air motors etc. with W&H Assistina
Distributor information	
Company identification	Ivoclar Vivadent (NZ) Ltd
Address	12 Omega Street, Rosedale, Auckland, New Zealand
Telephone Number	0508 486 252
Emergencies within New Zealand	0800 764 766 (National Poison Control Centre)

Section 2: Hazards Identification

Product is classified as hazardous according to the HSNO (Minimum Degrees of Hazard) Regulations 2001

NZ Group Standard & EPA Approval Code Cleaning Products (Flammable)
HSR002528



Flammable



Irritant

Hazard Classification	Hazard Code	Hazard Statement
3.1B	H225	Highly flammable liquid and vapour
6.4A	H319	Causes serious eye irritation
9.3C	H433	Harmful to terrestrial vertebrates
Prevention Code	Prevention Statement	
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.	
P264	Wash hands thoroughly after handling.	
P273	Avoid release to the environment.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
Response Code	Response Statement	
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.	
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P337 + P313	If eye irritation persists: Get medical advice/attention.	
P370 + P378	In case of fire: Use Carbon dioxide (CO ₂), Extinguishing powder, Water spray, Water mist for extinction.	
Storage Code	Storage Statement	
P403 + P235	Store in a well-ventilated place. Keep cool.	
Disposal Code	Disposal Statement	
P501	Dispose of according to local regulations.	

Section 3: Composition/Information on Ingredients

Mixtures:

Description	W&H Cleaning solution contains alcohols and auxiliary agents in aqueous solution.
Hazardous ingredients	<p>1-PROPANOL ; REACH registration No. : 01-2119486761-29 ; EC No : 200-746-9; CAS No. : 71-23-8 Weight fraction : 30 - 35 % Classification 67/548/EEC : F ; R11 Xi ; R41 R67 Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Eye Dam. 1 ; H318 STOT SE 3 ; H336</p> <p>ETHANOL ; REACH registration No. : 01-2119457610-43 ; EC No : 200-578-6; CAS No. : 64-17-5 Weight fraction : 25 - 30 % Classification 67/548/EEC : F ; R11 Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225</p> <p>PROPAN-2-OL ; REACH registration No. : 01-2119457558-25 ; EC No : 200-661-7; CAS No. : 67-63-0 Weight fraction : 1 - 2 % Classification 67/548/EEC : F ; R11 Xi ; R36 R67 Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319 STOT SE 3 ; H336</p>
Additional information	Full text of R-, H- and EUH-phrases: see section 16.

Section 4: First Aid Measures

Description of first aid measures:	
General information	When in doubt or if symptoms are observed, get medical advice.
After inhalation	Provide fresh air. In case of respiratory tract irritation, consult a physician.
In case of skin contact	Wash with plenty of water. When in doubt or if symptoms are observed, get medical advice.
After eye contact	In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
After ingestion	If swallowed, immediately drink: Water Never give anything by mouth to an unconscious person or a person with cramps. Do not induce vomiting. Call a physician immediately.
Most important symptoms and effects, both acute and delayed	Vapours may cause drowsiness and dizziness.
Indication of any immediate medical attention and special treatment needed	None.

Section 5: Fire Fighting Measures

Extinguishing media:	
Suitable extinguishing media	Carbon dioxide (CO2). Extinguishing powder. Water spray. Water mist.
Unsuitable extinguishing media	High power water jet.
Special hazards arising from the substance or mixture	None known.
Hazardous combustion products	Vapours can form explosive mixtures with air.
Advice for firefighters	Cool endangered containers with water in case of fire.
Special protective equipment for firefighters	In case of fire: Wear self-contained breathing apparatus.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Use personal protection equipment. Remove all sources of ignition. When using do not smoke. See protective measures under point 7 and 8.
For non-emergency personnel	Use personal protection equipment. See protective measures under point 7 and 8.
For emergency responders:	
Personal protection equipment	See protective measures under point 7 and 8.
Environmental precautions	Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.
Methods and material for containment and cleaning up:	

For cleaning up	Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.
Other information	Treat the recovered material as prescribed in the section on waste disposal.
Reference to other sections	None.

Section 7: Handling and Storage

Precautions for safe handling	Keep/Store only in original container. Please note safety instructions and directions for use on the drum. Open and handle container with care. Keep away from sources of ignition. - No smoking. Provide adequate ventilation. Do not breathe vapour/aerosol.
Protective measures:	
Fire prevent measures	Usual measures for fire prevention. Keep away from sources of ignition - No smoking.
Conditions for safe storage, including any incompatibilities:	
Requirements for storage rooms and vessels	Keep/Store only in original container. Keep container tightly closed. Keep in a cool, well-ventilated place. Do not store in temperatures below 5 °C.
Hints on joint storage	Do not store together with oxidizing, self-igniting substances and highly flammable solid substances. Store the foodstuffs separately.
Specific end use(s)	None.

Section 8: Exposure Controls/Personal Protection

Control parameters:	
Occupational exposure limit values	<p>1-PROPANOL ; CAS No. : 71-23-8 Limit value type (country of origin) : TLV/STEL (GB) Limit value : 250 ppm / 625 mg/m³</p> <p>ETHANOL ; CAS No. : 64-17-5 Limit value type (country of origin) : TLV/TWA (GB) Limit value : 1000 ppm / 1920 mg/m³</p> <p>PROPAN-2-OL ; CAS No. : 67-63-0 Limit value type (country of origin) : TLV/STEL (GB) Limit value : 500 ppm / 1250 mg/m³ Limit value type (country of origin) : TLV/TWA (GB) Limit value : 400 ppm / 999 mg/m³</p>
DNEL/DMEL and PNEC values	There is no data available on the preparation itself.
DNEL/DMEL	<p>Limit value type : DNEL/DMEL (DNEL Consumer, Local) (ETHANOL ; CAS No. : 64-17-5) Exposure route : Inhalation Exposure frequency : Short-term (acute) Limit value : 950 mg/m³</p> <p>Limit value type : DNEL/DMEL (DNEL Consumer, Systemic) (ETHANOL ; CAS No. : 64-17-5) Exposure route : Oral Exposure frequency : Long-term (repeated) Limit value : 87 mg/kg Safety factor : 24 h Limit value type : DNEL/DMEL (DNEL Consumer, Systemic) (1-PROPANOL ; CAS No. : 71-23-8) Exposure route : Inhalation Exposure frequency : Short-term (acute) Limit value : 1036 mg/m³</p> <p>Limit value type : DNEL/DMEL (DNEL Consumer, Systemic) (PROPAN-2-OL ; CAS No. : 67-63-0) Exposure route : Dermal Exposure frequency : Long-term (repeated) Limit value : 319 mg/kg Safety factor : 24 h Limit value type : DNEL/DMEL (DNEL Consumer, Systemic) (PROPAN-2-OL ; CAS No. : 67-63-0) Exposure route : Inhalation Exposure frequency : Long-term (repeated) Limit value : 89 mg/m³</p> <p>Limit value type : DNEL/DMEL (DNEL Consumer, Systemic) (1-PROPANOL ; CAS No. : 71-23-8) Exposure route : Dermal</p>

Exposure frequency : Long-term (repeated)
 Limit value : 81 mg/kg
 Limit value type : DNEL/DMEL (DNEL Consumer, Systemic) (ETHANOL ; CAS No. : 64-17-5)
 Exposure route : Dermal
 Exposure frequency : Long-term (repeated)
 Limit value : 206 mg/kg
 Safety factor : 24 h
 Limit value type : DNEL/DMEL (DNEL Consumer, Systemic) (ETHANOL ; CAS No. : 64-17-5)
 Exposure route : Inhalation
 Exposure frequency : Long-term (repeated)
 Limit value : 114 mg/m³
 Limit value type : DNEL/DMEL (DNEL Consumer, Systemic) (1-PROPANOL ; CAS No. : 71-23-8)
 Exposure route : Inhalation
 Exposure frequency : Long-term (repeated)
 Limit value : 80 mg/m³
 Limit value type : DNEL/DMEL (DNEL Consumer, Systemic) (PROPAN-2-OL ; CAS No. : 67-63-0)
 Exposure route : Oral
 Exposure frequency : Long-term (repeated)
 Limit value : 26 mg/kg
 Safety factor : 24 h
 Limit value type : DNEL/DMEL (DNEL Consumer, Systemic) (1-PROPANOL ; CAS No. : 71-23-8)
 Exposure route : Oral
 Exposure frequency : Long-term (repeated)
 Limit value : 61 mg/kg
 Limit value type : DNEL/DMEL (Worker, Local) (ETHANOL ; CAS No. : 64-17-5)
 Exposure route : Inhalation
 Exposure frequency : Short-term (acute)
 Limit value : 1900 mg/m³
 Limit value type : DNEL/DMEL (Worker, Systemic) (ETHANOL ; CAS No. : 64-17-5)
 Exposure route : Dermal
 Exposure frequency : Long-term (repeated)
 Limit value : 343 mg/kg
 Safety factor : 24 h
 Limit value type : DNEL/DMEL (Worker, Systemic) (1-PROPANOL ; CAS No. : 71-23-8)
 Exposure route : Inhalation
 Exposure frequency : Short-term (acute)
 Limit value : 1723 mg/m³
 Limit value type : DNEL/DMEL (Worker, Systemic) (PROPAN-2-OL ; CAS No. : 67-63-0)
 Exposure route : Dermal
 Exposure frequency : Long-term (repeated)
 Limit value : 888 mg/kg
 Safety factor : 24 h
 Limit value type : DNEL/DMEL (Worker, Systemic) (PROPAN-2-OL ; CAS No. : 67-63-0)
 Exposure route : Inhalation
 Exposure frequency : Long-term (repeated)
 Limit value : 500 mg/m³
 Limit value type : DNEL/DMEL (Worker, Systemic) (1-PROPANOL ; CAS No. : 71-23-8)
 Exposure route : Dermal
 Exposure frequency : Long-term (repeated)
 Limit value : 136 mg/kg
 Limit value type : DNEL/DMEL (Worker, Systemic) (ETHANOL ; CAS No. : 64-17-5)
 Exposure route : Inhalation
 Exposure frequency : Long-term (repeated)
 Limit value : 950 mg/m³
 Limit value type : DNEL/DMEL (Worker, Systemic) (1-PROPANOL ; CAS No. : 71-23-8)
 Exposure route : Inhalation
 Exposure frequency : Long-term (repeated)
 Limit value : 268 mg/m³
 Limit value type : PNEC aquatic, freshwater (ETHANOL ; CAS No. : 64-17-5)
 Limit value : 960 µg/l
 Limit value type : PNEC aquatic, freshwater (1-PROPANOL ; CAS No. : 71-23-8)
 Limit value : 10 mg/l
 Limit value type : PNEC aquatic, freshwater (PROPAN-2-OL ; CAS No. : 67-63-0)
 Limit value : 140,9 mg/l
 Limit value type : PNEC aquatic, marine water (PROPAN-2-OL ; CAS No. : 67-63-0)
 Limit value : 140,9 mg/l
 Limit value type : PNEC aquatic, marine water (1-PROPANOL ; CAS No. : 71-23-8)

PNEC

Limit value : 1 mg/l
 Limit value type : PNEC aquatic, marine water (ETHANOL ; CAS No. : 64-17-5)
 Limit value : 790 µg/l
 Limit value type : PNEC (Industrial) (ETHANOL ; CAS No. : 64-17-5)
 Exposure route : Soil
 Limit value : 0,63 mg/kg
 Limit value type : PNEC (Industrial) (1-PROPANOL ; CAS No. : 71-23-8)
 Exposure route : Soil
 Limit value : 2,2 mg/kg
 Limit value type : PNEC (Industrial) (PROPAN-2-OL ; CAS No. : 67-63-0)
 Exposure route : Soil
 Limit value : 28 mg/kg
 Limit value type : PNEC sediment, freshwater (PROPAN-2-OL ; CAS No. : 67-63-0)
 Limit value : 552 mg/kg
 Limit value type : PNEC sediment, freshwater (1-PROPANOL ; CAS No. : 71-23-8)
 Limit value : 22,8 mg/kg
 Limit value type : PNEC sediment, freshwater (ETHANOL ; CAS No. : 64-17-5)
 Limit value : 3,6 mg/kg
 Limit value type : PNEC sediment, marine water (1-PROPANOL ; CAS No. : 71-23-8)
 Limit value : 2,28 mg/kg
 Limit value type : PNEC Secondary Poisoning (ETHANOL ; CAS No. : 64-17-5)
 Limit value : 0,72 mg/kg
 Limit value type : PNEC Secondary Poisoning (PROPAN-2-OL ; CAS No. : 67-63-0)
 Limit value : 160 mg/kg
 Limit value type : PNEC sewage treatment plant (STP) (PROPAN-2-OL ; CAS No. : 67-63-0)
 Limit value : 2251 mg/l

Exposure controls:

Personal protection equipment:

Eye/face protection Eye glasses with side protection DIN EN 166.

Skin protection:

Hand protection Short-term exposure (Level 2: < 30 min): disposable gloves to EN374 category III, e.g. nitrile rubber, material thickness 0.1 mm.
 Long-term exposure (Level 6: < 480 min): protective gloves to EN374 category III, e.g. nitrile rubber, material thickness 0.7 mm.
 When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

Body protection Body protection: not applicable.

Respiratory protection Usually no personal reparative protection necessary.

General health and safety measures Keep away from food, drink and animal feeding stuffs. Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing. Wash hands before breaks and after work. Separate storage of work clothes. When using do not eat, drink, smoke, sniff.

Occupational exposure controls:

Technical measures to prevent exposure Provide adequate ventilation.

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties:

Appearance Liquid

Colour Colourless

Odour Alcohol

Safety related basis data:

Melting point/melting range (1013 hPa) No data available

Boiling temperature/boiling range (1013 hPa) No data available

Decomposition temperature (1013 hPa) No data available

Flash point	25 °C
Ignition temperature	360 °C
Lower explosion limit	2,1 Vol-%
Upper explosion limit	15 Vol-%
Vapour pressure	(50 °C) ca. 150 hPa
Density	(20 °C) 0,87 - 0,91 g/cm ³
Solvent separation test	(20 °C) < 3 %
Water solubility	(20 °C) 100 Wt %
pH value	5 - 8,5
log P O/W	No data available
Flow time	(20 °C) < 20 s DIN-cup 4 mm
Odour threshold	No data available
Oxidising liquids	Not applicable
Explosive properties	Not applicable
Corrosive to metals	Not corrosive to metals
Other information	None

Section 10: Stability and Reactivity

Reactivity	None, if handled according to order.
Chemical stability	Stable under recommended storage and handling conditions (see section 7).
Possibility of hazardous reactions	Vapours can form explosive mixtures with air.
Conditions to avoid	No information available.
Incompatible materials	Oxidising agent.
Hazardous decomposition products	None known.

Section 11: Toxicological Information

Information on toxicological effects:	
Acute effects:	
Acute oral toxicity	Parameter : LD50 Exposure route : Oral Species : Rat Effective dose : > 2000 mg/kg Methode : OECD 401.
Practical experience/human evidence	The product does not have any skin irritating or sensitizing properties. There is no inhalation risk under normal application conditions.
Acute dermal toxicity	Parameter : LD50 Exposure route : Dermal Species : Rat Effective dose : > 2000 mg/kg Methode : OECD 402.
Acute inhalation toxicity	Parameter : LC50 (1-PROPANOL ; CAS No. : 71-23-8) Exposure route : Inhalation Species : Rat Effective dose : > 33,8 mg/l Exposure time : 4 h Parameter : LC50 (ETHANOL ; CAS No. : 64-17-5) Exposure route : Inhalation Species : Rat Effective dose : > 51 mg/l

	Exposure time : 4 h Parameter : LD50 (PROPAN-2-OL ; CAS No. : 67-63-0) Exposure route : Inhalation Species : Rat Effective dose : 47,5 mg/l
Irritant and corrosive effects	Rabbit's eye: no irritation. Methode : OECD 405.
Sensitisation	There is no data available on the mixture itself.
Additional information	The classification was carried out according to the calculation method of Regulation No. (EC) 1272/2008 [CLP] as well as in-house investigations.

Section 12: Ecological Information

Toxicity:	
Aquatic toxicity	There are no data available on the preparation itself.
Acute (short-term) fish toxicity	Parameter : LC50 (ETHANOL ; CAS No. : 64-17-5) Species : Oncorhynchus mykiss (Rainbow trout) Evaluation parameter : Acute (short-term) fish toxicity Effective dose : 11200 mg/l Parameter : LC50 (1-PROPANOL ; CAS No. : 71-23-8) Species : Pimephales promelas (fathead minnow) Evaluation parameter : Acute (short-term) fish toxicity Effective dose : 4480 mg/l Exposure time : 96 h Parameter : LC50 (PROPAN-2-OL ; CAS No. : 67-63-0) Species : Pimephales promelas (fathead minnow) Evaluation parameter : Acute (short-term) fish toxicity Effective dose : 9640 mg/l Exposure time : 96 h
Acute (short-term) daphnia toxicity	Parameter : EC50 (1-PROPANOL ; CAS No. : 71-23-8) Species : Daphnia magna (Big water flea) Evaluation parameter : Acute (short-term) daphnia toxicity Effective dose : 3644 mg/l Exposure time : 48 h Parameter : EC50 (PROPAN-2-OL ; CAS No. : 67-63-0) Species : Daphnia magna (Big water flea) Evaluation parameter : Acute (short-term) daphnia toxicity Effective dose : 13299 mg/l Exposure time : 48 h Parameter : EC50 (PROPAN-2-OL ; CAS No. : 67-63-0) Species : Daphnia magna (Big water flea) Evaluation parameter : Acute (short-term) daphnia toxicity Effective dose : 9714 mg/l Exposure time : 24 h Parameter : EC50 (ETHANOL ; CAS No. : 64-17-5) Species : Ceriodaphnia spec Evaluation parameter : Acute (short-term) daphnia toxicity Effective dose : 1806 mg/l
Acute (short-term) algae toxicity	Parameter : EC50 (1-PROPANOL ; CAS No. : 71-23-8) Species : Scenedesmus subspicatus Evaluation parameter : Inhibition of growth rate Effective dose : 3100 mg/l Exposure time : 168 h Parameter : EC50 (PROPAN-2-OL ; CAS No. : 67-63-0) Species : Pseudokirchneriella subcapitata Evaluation parameter : Acute (short-term) algae toxicity Effective dose : > 1000 mg/l Exposure time : 72 h Parameter : EC50 (PROPAN-2-OL ; CAS No. : 67-63-0) Species : Scenedesmus subspicatus Evaluation parameter : Acute (short-term) algae toxicity Effective dose : > 100 mg/l Exposure time : 72 h Parameter : EC50 (ETHANOL ; CAS No. : 64-17-5)

Species : *Chlorella vulgaris*
 Evaluation parameter : Acute (short-term) algae toxicity
 Effective dose : 275 mg/l
 Parameter : EC50 (ETHANOL ; CAS No. : 64-17-5)
 Species : *Selenastrum capricornutum*
 Evaluation parameter : Acute (short-term) algae toxicity
 Effective dose : 440 mg/l
 Parameter : IC50 (ETHANOL ; CAS No. : 64-17-5)
 Species : *Scenedesmus subspicatus*
 Evaluation parameter : Acute (short-term) algae toxicity
 Effective dose : > 100 mg/l

Bacteria toxicity

Parameter : EC50 (1-PROPANOL ; CAS No. : 71-23-8)
 Species : *Pseudomonas putida*
 Evaluation parameter : Bacteria toxicity
 Effective dose : 2700 mg/l
 Exposure time : 16 h
 Parameter : EC10 (PROPAN-2-OL ; CAS No. : 67-63-0)
 Species : *Pseudomonas putida*
 Evaluation parameter : Bacteria toxicity
 Effective dose : 5175 mg/l
 Exposure time : 18 h

Persistence and degradability:

Abiotic degradation

No data available.

Biodegradation

The product is easily biodegradable according to OECD criteria. Methode : OECD 301 D.

Bioaccumulative potential

No information available.

Mobility in soil:

Known or predicted distribution to environmental compartments

There is no data available on the preparation itself.

Results of PBT and vPvB assessment

No information available.

Other adverse effects

No information available.

Further ecological information

Prevent from flowing into surface water/ground water.

Section 13: Disposal Considerations

Waste treatment methods:

Product/Packaging disposal:

Waste codes/waste designations according to EWC:

Waste code product

Concentrate/larger quantities: 18 01 06* (disinfectant).

Waste treatment options:

Appropriate disposal/product

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal/package

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

Section 14: Transport Information

UN Number

1987

DG Proper Shipping Name

Alcohol, N.O.S

DG Class and subsidiary risk

Class 3 Flammable

Packing group

II

Hazchem code

3(Y)E

Dangerous goods segregation

This product is classified as Dangerous Goods Class 3, packing group II.
 Please consult NZS 5433 Safe Transport of Dangerous Goods for more information.



Flammable

Section 15: Regulatory Information

NZ Group Standard & EPA Approval Code Cleaning Products (Flammable)
 HSR002528

HSNO Controls:

Trigger quantities for this substance:

	Trigger Quantity
Approved Handler	≥250 L if container >5 L ≥500 L if container <5 L
Location Certificate	100 L (>5 L), 250 L (<5 L); 50 L open
Tracking Trigger Quantities	Not applicable
Signage Trigger Quantities	250 L (liquid) / kg (solid)
Emergency Response Plan Trigger Quantities	1,000 L (liquid) / kg (solid)

Section 16: Other Information

This document has been compiled by Ivoclar Vivadent Ltd on behalf of the manufacturer of the product and serves as the manufacturer's Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to Ivoclar Vivadent (NZ) Ltd by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While Ivoclar Vivadent (NZ) Ltd has taken all care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Ivoclar Vivadent (NZ) Ltd accepts no liability or any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS. The information herein is given in good faith, but no warranty, express or implied is made.

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