SAFETY DATA SHEET

Section 1. Product And Company Identification

Product Name: VioNexus™ No Rinse Spray
Product Use: Antiseptic Handwash

Manufacturer: METREX™ RESEARCH
1717 W. Collins Ave.
Orange, CA 92867
U.S.A.

Information Phone Number: 1-800-841-1428 (Customer Service)

Chemical Emergency Phone Number (Chemical Spills, Leaks, Fire, Exposure or Accident only):
CHEMTREC 1-800-424-9300 (in the US) 1-703-527-3887 (Outside the US)

SDS Date Of Preparation/Revision: November 12, 2014

Section 2. Hazards Identification

GHS / HAZCOM 2012 Classification:
Flammable Liquid Category 3
Eye Irritation Category 2A

Warning!

Hazard Phrases:
Flammable liquid and vapor.
Causes eye irritation.

Prevention:
Keep away from heat, sparks, open flames, hot surfaces – No smoking.
Keep container tightly closed.
Use explosion-proof electrical, ventilating and light equipment.
Take precautionary measures against static discharge.
Wear protective gloves and eye protection.
Wash thoroughly after handling.

Response:
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If eye irritation persists get medical attention.
In case of fire: Use water spray or fog, alcohol-resistant foam, carbon dioxide or dry chemical to extinguish.

Storage:
Store in a well ventilated place. Keep cool.

Disposal:
Dispose of contents and container in accordance with local and national regulations.

Other hazards: None

Section 3. Composition/Information On Ingredients

Component	CAS No.	Amount
Ethanol	64-17-5	50-70%
Acetone	67-64-1	1-10%
Glycerin	56-81-5	1-5%

Section 4. First Aid Measures

Inhalation: If irritation occurs, remove to fresh air. Get medical attention if symptoms persists.

Skin Contact: This product is intended to contact the skin. If irritation develops, discontinue use and get medical advice.

Eye Contact: Immediately flush eye with water for several minutes while lifting the upper and lower lids. Get medical attention if irritation persists.

Ingestion: Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious or drowsy person. Get medical attention.

Most Important symptoms and effects, both acute and delayed: Causes eye irritation. High concentrations of vapors or mists may cause mucous membrane and upper respiratory tract irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Indication of any immediate medical attention and special treatment needed: None required under normal conditions of use.

Section 5. Fire Fighting Measures

Suitable (and Unsuitable) Extinguishing Media: Use water spray or fog, alcohol-resistant foam, carbon dioxide or dry chemical. Cool fire exposed containers with water.

Specific Hazards Arising from the Chemical: Flammable liquid and vapor. May form explosive mixtures in air at temperatures at or above the flashpoint. Flammable vapors may collect in confined areas. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flashback. Fire exposed containers may rupture explosively.

Special Protective Equipment and Precautions for Fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

Section 6: Accidental Release Measures

Personal precautions, Protective equipment, and Emergency procedures: Wear appropriate protective clothing and equipment.

Environmental Precautions: Avoid release to the environment. Report spill as required by local and federal regulations.

Methods and Materials for Containment and Cleaning up: Eliminate all ignition sources. Ventilate area. Use explosion-proof equipment if large amounts are released. Stop leak if it is safe to do so and move containers from the spill area. Collect material with an inert absorbent material and place in appropriate container for disposal.

Section 7. Handling and Storage

Precautions for Safe Handling: Avoid contact with eyes. Use with adequate ventilation. Keep away from heat, sparks, open flames and all other sources of ignition. Do not smoke in storage or use areas.

Conditions for Safe Storage, Including any Incompatibilities: Store in a cool, well ventilated area away from heat and all sources of ignition. Protect from physical damage.

Section 8. Exposure Controls / Personal Protection

Exposure Limits

Chemical	Exposure Limit
Ethanol	1000 ppm STEL ACGIH TLV 1000 ppm TWA OSHA PEL
Acetone	1000 ppm TWA OSHA PEL 500 ppm TWA ACGIH TLV, 750 ppm STEL
Glycerin	5 mg/m3 TWA OSHA PEL (respirable fraction), 15 mg/m3 TWA OSHA PEL(total dust)

Appropriate Engineering Controls: General ventilation should be adequate for normal use. For operations where the exposure limits may be exceeded, mechanical ventilation such as local exhaust may be needed. Use explosion proof electrical equipment and wiring where required.

Respiratory Protection: None under normal use conditions with adequate ventilation. For operations where the occupational exposure limits are exceeded, an approved respirator with an organic vapor cartridge or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration. Select in accordance with applicable regulations and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

Hand protection: This product is intended to contact the skin.

Eye Protection: Avoid eye contact. Safety glasses or goggles recommended when handling large amounts.

Skin Protection: This product is intended to contact the skin

Hygiene measures: None normally needed.

Section 9. Physical and Chemical Properties

Appearance:	Clear liquid	**Odor:**	Mild alcohol odor.
Odor Threshold:	0.136 ppm (ethyl alcohol)	**pH:**	Not available
Melting/Freezing Point:	Not available	**Boiling Point/Range:**	83°C / 186.8°F
Flash Point:	77°F / 25°C (open cup)	**Evaporation Rate:**	3.7 (butyl acetate=1) (ethyl alcohol)
Flammability: (Solid, Gas)	Not applicable	**Flammability Limits:**	LEL: 2.5% (acetone) UEL: 19% (ethanol)
Vapor Pressure:	59.3 mmHg @ 25°C (ethanol)	**Vapor Density:**	1.5 (ethanol)
Relative Density:	0.87	**Solubilities:**	Completely soluble in water
Partition Coefficient: (N-Octanol/Water)	Not determined	**Autoignition Temperature:**	>685°F / >363°C (ethanol)
Decomposition Temperature:	Not determined	**Viscosity:**	Not determined

Section 10. Stability and Reactivity

Reactivity: Not reactive at ambient temperatures.
Chemical Stability: Stable.
Possibility of Hazardous Reactions: Not reactive.
Conditions to avoid: Heat, sparks, flames and all other sources of ignition.
Incompatible Materials: Strong oxidizing agents and acids.
Hazardous decomposition products: Thermal decomposition will produce carbon monoxide and carbon dioxide.

Section 11. Toxicological Information

Potential Health Effects:

Inhalation: May cause irritation of the nose, throat and upper respiratory tract. High vapor concentrations may produce headache, dizziness, drowsiness, weakness, fatigue and possible unconsciousness.

Skin Contact: This product is intended to contact the skin and no irritation or other adverse effects are expected. Prolonged skin contact may cause drying of the skin.

Eye Contact: May cause irritation with tearing, redness and pain.

Ingestion: Ingestion may cause gastrointestinal disturbances and central nervous system effects such as headache, dizziness, drowsiness weakness, fatigue and possible unconsciousness.

Chronic Hazards: Ethanol is known to cause developmental toxicity when intentionally ingested during pregnancy.

Carcinogen: None of the components is listed as a carcinogen or potential carcinogen by IARC, NTP, or OSHA.

Mutagenicity: Ethanol and acetone were negative in mutagenic tests in bacteria and animals.

Reproductive Toxicity: Repeated ingestion of ethanol by pregnant mothers has been shown to adversely affect the central nervous system of the fetus, resulting in fetal alcohol syndrome. These effects include mental and physical retardation, disturbances of learning, motor and language deficiencies, behavioral disorders and small head size.

Acute Toxicity:
Ethanol: Oral rat LD50 7,060 mg/kg; Inhalation rat LC50 124.7 mg/L/4hr
Acetone: Oral rat LD50 5,800 mg/kg, Inhalation Rat LC50 76 mg/L/4 hr, Skin Rabbit LD50->7,426 mg/kg
Glycerin: Oral rat LD50 27,200 mg/kg, dermal guinea pig LD50 56,750 mg/kg, Inhalation rat LC50 >2.75 mg/L/4 hr

Section 12. Ecological Information

Toxicity:
Ethanol: 96 hr LC50 Pimephales promelas 14.2 g/L; 48 hr LC50 daphnia magna 9248 mg/L ; 48 hr EC50 Chlorella pyrenoidosa 9310 mg/L
Acetone: 96 hr LC50 Pimephales promelas 6210 mg/L; 48 hr LC50 Daphnia pulex 8800 mg/L
Glycerin: 96 hr LC50 Oncorhynchus mykiss 54000 mg/L, 48 hr LC50 daphnia magna 1955 mg/L

Persistence and degradability: Ethanol, acetone and glycerin are readily biodegradable.

Bioaccumulative Potential: Ethanol, acetone and glycerin have an estimated BCF of 3 suggesting that the potential for bioaccumulation is low.

Mobility in Soil: Ethanol, acetone and glycerin are expected to have very high mobility in soil.

Other Adverse Effects: None known

Section 13. Disposal Considerations

Solution Disposal: Dispose in accordance with Federal, State, and local regulations.
Container Disposal: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. If recycling is not available, discard in accordance with hospital policy.

Section 14. Transport Information

	UN Number	UN Proper Shipping Name	Hazard Class(s)	Packing Group	Environmental Hazards
US DOT	UN1170	Ethanol Solution	3	III	None
Canada TDG	UN1170	Ethanol Solution	3	III	None
IMDG	UN1170	Ethanol Solution	3	III	None
IATA/ICAO	UN1170	Ethanol Solution	3	III	None

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None identified

Section 15. Regulatory Information

U.S. Federal Regulations:

EPA SARA 311/312 Hazard Classification: Fire Hazard, Acute Health

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

Protection Of Stratospheric Ozone: This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

CERCLA SECTION 103: This product has a Reportable Quantity (RQ) of 100,000 lbs. based on the RQ for Acetone of 5,000 lbs. Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

International Inventories

US EPA TSCA Inventory: All of the components of this product are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory or exempt.

Canadian Environmental Protection Act: All of the components in this product are listed on the Domestic Substances List (DSL) or exempt.

Australia: All of the components in this product are listed on the Australian Inventory of Chemical Substances (AICS) or exempt.

China: All of the components in this product are listed on the Inventory of Existing Chemical Substances in China (IECSC) or exempt.

European Union: All the components in this product are listed on the EINECS inventory or exempt.

Japan: All of the components in this product are listed on the Japanese Existing and New Chemical Substances (ENCS) inventory or exempt.

Korea: All of the components in this product are listed on the Korean Existing Chemicals List (KECL) or exempt.

New Zealand: All of the components in this product are listed on the New Zealand Inventory of Chemicals (NZIoC) or exempt.

Philippines: All of the components of this product are listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS) or exempt.

Section 16. Other Information

NFPA Rating: Fire: 3 Health: 2 Instability: 0

Effective Date: November 10, 2014

Supersedes Date: January 2, 2007

Revision Summary: All sections. Converted to GHS format

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