



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1 - Identity

Product: *N'viro Gold #1* – Environment friendly Cutting Fluid formulated for all applications, without harming the environment

Available in:-

- 500 ml cans, 5 litre cans, 25 litre drums, 200 litre drums,

Manufactured under licence by Fuloos cc T/A Duncan Macdonald & Co, Telephone: +27 11 444 4345/6/7/8/9

SECTION 2 – Composition of Ingredients

N'viro Gold #1- does not contain chlorinated solvents or harmful chemicals, consists of Vegetable Esters and selected Animal fats.

30 Spectrometric analyses reported in parts per million

Calcium	368
Magnesium	0
Molybdenum	0
Zinc	0
Boron	0
Phosphorous	0
Sulphur content	463

Hazardous Components

<u>CAS-No.</u>	<u>Chemical Name</u>
5989-27-5	d-Limonene
94266-47-4	Citrus terpenes

SECTION 3 – Hazardous Identification

Primary Routes of Entry: Skin, Eye, Ingestion, Inhalation.

Signs & Symptoms of exposure:

Inhalation: High levels of mist may cause irritation to respiratory system.
Skin: Contact may cause irritation.
Eye: May cause irritation.
Ingestion: May cause gastrointestinal irritation.
Acute: None Known.
Chronic: None Known.



SECTION 4 – First Aid Measures

Eyes: Flush eyes with water for at least 15 minutes, if irritation persist contact an eye specialist.
Skin: May be removed by washing with soap and warm water, if irritation persist contact a physician.
Inhalation: Expose individual to fresh air, if unconscious place in recovery position and seek medical advice.
Ingestion: Do not induce vomiting, contact physician immediately.

For skin or eye contact, see a physician/eye specialist if irritation develops

SECTION 5 – Fire Fighting Measures

Flammable: Yes—OHS Class III B
Flash point Close Cup Method: 58°c
Extinguishing Media: Foam CO2, Dry Chemical, Sand
Special Fire Fighting Procedures: Water or foam may cause frothing if directed into containers of burning liquid, Fire fighters should wear protective clothing, adhere to all OHS regulations.

SECTION 6 – Accidental Release Measures

If material is spilled: Depending on quantity of spill, add solid absorbent, shovel or scoop into disposal container and hose or wash down area, wear protective clothing.

Personal Precautions:

Respiratory Protection: Wear protective clothing.
Ventilation: Wear protective clothing.
Protection gloves: Wear protective clothing.
Eye Protection: Wear protective clothing.
Additional Clothing: Wear properly soled shoes to avoid slipping.

Environmental Precautions: Dispose of in accordance with local, state, and federal regulations, adhere to all OHS regulations.

SECTION 7 – Handling and Storage

Handling: Wear mask in areas of misting. Wear properly soled shoes to avoid slipping.
Storage: Store away from flame, fire, and excessive heat.
Other Precautions: Do not cut, puncture, or weld on or near empty containers.

SECTION 8 – Exposure Controls/Personal Protection

Eye Protection: Safety goggles / glasses to guard.
Skin Protection: Neoprene/Rubber gloves.
Respiratory Protection: Not normally needed, wear mask in misting areas.
Ventilation: Not normally needed, local exhaust extraction fan to prevent misting if necessary.
Additional Clothing: Apron, optional against splash.

Components with workplace control parameters

CAS-No	Components	Value type (Form of exposure)	Control parameters / Permissible concentration
5989-27-5	d-Limonene	TWA	20 ppm

SECTION 9 – Exposure Controls/Personal Protection

Physical State: Liquid
Appearance: Yellow / Gold
Odor: Lemon
Viscosity in cSt @40°C: 1.9
Solubility in Water: Insoluble
Flash point Close Cup Method: 58°C
Density: 25°C (0,84 g/cm³)
pH: not applicable
Vapor Density: Heavier than air
Solubility in water: Not soluble
Evaporation rate: 0.2 n-Butyl Acetate
Vapour pressure: < 2 mmHg @ 20 °C (68 °F)
Vapour density: 4.7
Relative density: 0.838 - 0.843 @ 25 °C (77 °F)
Auto-ignition temperature: 237 °C

SECTION 10 – Stability and Reactivity

Stability: Stable at ambient temperature.
Reactivity; No dangerous reaction known under conditions of normal use.
Chemical stability; Stable under normal conditions.
Conditions to Avoid: Open flame or temperature >100 °C
Incompatibility: Strong oxidizing agents
Hazardous Decomposition Products: None
Hazardous Polymerization: Will Not Occur

SECTION 11 – Toxicological Information

Overall Toxicity:	0
Flammability:	2
Destructive to Eyes/Skin:	2
Absorbed through Skin:	2
Sensitizer:	0
Self-reactive:	0

Acute toxicity:

Acute oral toxicity: Acute toxicity estimate: 2,340 mg/kg
Method: - Calculation method

Acute dermal toxicity: Acute toxicity estimate: 5,000 mg/kg
Method: - Calculation method

SECTION 12 – Ecological Information

Disposals: Recyclable as a natural product, biodegrading is expected; observe all Government, Provincial/State, and Municipal Laws & Regulations

SECTION 13 – Disposal Considerations

Waste Disposal Method(s): Dispose of in accordance with local, state, and Government regulations.
Water Disposals: observe all Government, Provincial/State, and Municipal Laws and Regulations

SECTION 14 – Transport Considerations

IATA (International Air Transport Association): UN2319, TERPENE HYDROCARBONS, N.O.S., 3 , III

SECTION 15 – Regulatory Information

VEGETABLE ESTERS

Sunflower Oil	CAS-8001-21-6, EC Nr 232-273-9
Castor Oil	CAS-8001-79-4, EC Nr 232-293-8
Soya Bean Oil	CAS-8013-07-8, EC Nr 232-274-4
Palm oil	CAS-8002-75-3, EC Nr 297-113-2

TRIGLYCERIDES OF ANIMAL ORIGIN

Melaleuca oil	CAS-68647-73-4, EC Nr 285-377-1
d-Limonene	CAS-5989-27-5
Citrus terpenes	CAS-94266-47-4

SECTION 16 – Disclaimer

To the best of our knowledge, the information contained herein is accurate and is provided in good faith to comply with applicable

laws, however, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user.

All materials may present unknown hazards and should be used with caution, although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.