

Section 1. Product and Company Information

Company: Vermillion River LLC
830 Industrial Park Dr SE
Lonsdale MN 55046
651-705-2400

Product Name: Nicotine Solution – Plant Derived Nicotine in a Vegetable Derived Glycerin Solution
CAS#: Mixture – N/A
CI#: N/A

Synonym: Nicotine Glycerin Solution;
Nicotine Preparation, liquid, Not
Otherwise Specified



Section 2. Hazard Identification

Potential Acute Health Effects: In case of skin contact (irritant, permeates skin), of eye contact (irritant), of Ingestion (irritant) of inhalation (irritant and toxic).

Potential Chronic Health Effects: Not known/ Information not available

Carcinogenic Effects: Not known/ Information not available

Mutagenic Effects: Not Available but not likely to be mutagenic – Glycerin.

Teratogenic Effects: Not known/ Information not available

Developmental Toxicity: Not known/ Information not available

The major component, Glycerin, is generally recognized as safe (GRAS) by the US Food and Drug Administration.

Toxicity or organ system damage is most likely to be caused by the presence of Nicotine.

Section 3. Composition/Information on Ingredients

Composition:

Sr. No.	Name	CAS#	% by weight
1	Nicotine - 54-11-5		10%
2	Glycerin - 56-81-5		90 %

Toxicological Data on Ingredients:

ORAL (LD50 Rat): 482.75 mg/kg

DERMAL (LD50 Rabbit): 478.46 mg/kg

Section 4. First Aid Measures

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cold water may be used for rinsing. Discard contaminated clothing and footwear after rinsing. Get medical attention immediately even if no sign or symptoms are noted or reported.

Inhalation: If inhaled as an aerosol or if aspirated as liquid, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen if available and first aid if qualified. Get medical attention immediately.

Nicotine-Glycerin Solution

Serious Inhalation: Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as collar tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform suitable first aid of resuscitation. Seek medical attention immediately.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as collar, tie, belt or waistband. Get medical attention immediately.

Section 5. Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: No information available

Flash Point: No information available

Flammable Limits: No information available

Product of Combustion: Carbon Oxides (CO, CO₂), Nitrogen Oxide (NO, NO₂ ...) are expected if combustion occurs.

Fire Hazard in Presence of various substances:

Vegetable Glycerin: Not combustible.

Explosion Hazards in presence of various substances: No information available

Risks of explosion of the product in presence of mechanical impact: Not available

Risks of explosion of the product in presence of static discharge: Not available

Non-flammable in presence of shocks.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6. Accidental Release Measures

Small Spill: Dilute with water and absorb with an inert dry material; carefully collect and place in an appropriate waste disposal container.

Large Spill: Stop leak if this can be done without risk. Do not get water inside container. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

Section 7. Handling and Storage

Precautions: Keep away from heat. Keep away from source of ignition. Empty containers may pose a fire risk; evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapor/spray. Wear suitable protective clothing.

In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. For long term storage keep solution in a non-breakable container with an airtight lid. To help prevent oxidation, keep away from heat, light and in contact with as little oxygen as possible.

Section 8. Exposure Controls/Personal Protection

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the workstation location.

Personal Protection: Safety glasses. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of Large Spill: Splash goggles. Full suit or liquid/chemical resistant sleeves. Vapor respirator. Particle mask for nose on mouth. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Respirable: Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance: Liquid. (Viscous (Syrupy) liquid).

Odor: Mild.

Taste: Sweet. Do not test this property as Nicotine is absorbed in the mouth.

Color: Clear Colorless.

pH : 9.7 ± 0.2

Critical Temperature: Not available.

Specific Gravity: 1.029 ± 0.04

Vapor Pressure: Not available.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Ionicity (in Water): Not available.

Solubility: Miscible in cold water, hot water and alcohol. Partially soluble in acetone. Very slightly soluble in diethyl ether (ethyl ether).

Limited solubility in ethyl acetate. Insoluble in Carbon tetrachloride, Benzene, Chloroform, Petroleum ethers and oils.

Section 10. Stability and Reactivity Data

Stability: The product is stable under normal conditions.

Instability Temperature: Not available or known.

Conditions of Instability: Avoid contact with incompatible materials, excess heat and ignition, sources, moisture.

Incompatibility with various substances: May react with oxidizing agents.

Corrosivity: Non-corrosive.

Special Remarks on Corrosivity: Not available.

Special Remarks on Reactivity: None Known.

Hygroscopic:

Polymerization: Will not occur.

Section 11. Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact. May be absorbed by lungs in aerosol form. Absorbed by Mouth

Toxicity to Animals**Acute-oral toxicity (LD50):**

Acute Oral toxicity (LD50 Rat): 482.75 mg/kg

Acute Dermal toxicity (LD50 Rabbit) : 478.46 mg/kg

Acute toxicity of mist (LC50): Not determined for this mixture. Aerosol inhalation may be irritant.

Chronic Effects on Humans: CNS and Cardiovascular systems are affected by Nicotine. Chronic inhalation reaction, due to deposition of Lipid substance.

Other Toxic Effects on Humans:

Special Remarks on Toxicity to animals: Not available.

Special Remarks on Chronic Effects on Humans: May cause adverse reproductive effects based on animal studies.

Acute Potential Health Effects: Skin: May cause skin irritation. May be absorbed through skin. (Nicotine)

Eyes: May cause eye irritation with stinging, redness, burning sensation, and tearing.

Ingestion: Slightly Toxic:

Nicotine toxicity predominates but if ingested, gastrointestinal tract irritation with thirst (dehydration), nausea, vomiting and diarrhea may occur. This mixture may affect behavior/central nervous system (central nervous system depression, general anesthetic, headache, dizziness, difficulty, breathing, pallor, excess salivation, confusion, lack of coordination, insomnia), liver. It may also cause elevated blood sugar.

Inhalation: Due to low vapor pressure, inhalation of the vapors at room temperature is unlikely. Inhalation of mist may cause respiratory tract irritation.

Chronic Potential Health Effects: Ingestion: Prolonged or repeated ingestion may affect the blood (hemolysis, fibrolysis changes in white blood cell count), endocrine system (changes in adrenal weigh), and respiratory system and may cause kidney injury. Toxicity of Mixture is inferred.

Section 12. Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the products of Biodegradation: Not known

Special Remarks on the Products of Biodegradation: None

Section 13. Disposal Consideration

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14. Transportation Information

DOT Classification: Not a DOT controlled material

Identification: Not applicable.

Special Provisions for Transport: Not applicable

UN proper shipping name

IATA: Not dangerous goods

Section 15. Regulatory Information

Other Classifications: WHMIS (Canada): Not known to be controlled under WHMIS (Canada).

DSCL (EEC): Not available S24/25- Avoid contact with skin and eyes.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard: May be absorbed through the skin; Moderately acutely toxic.

Protective Equipment: Gloves. Lab coat. Use MSA or NIOSH approved respirator when ventilation is inadequate.

Safety glasses.

Section 16. Other Information

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Vermillion River LLC. The data on this MSDS are related only to the specific material designed herein. Vermillion River LLC assumes no legal responsibility for use or reliance upon this date.

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