SECTION 1: Identification of the substance/mixture and of the company

1.1 Product identifier

- Product Name: **Propylene Glycol, U.S.P.**
- Product Part Number(s): **79231**
- Brand(s): Ideal® Animal Health

1.2 Relevant identified uses of the substance or mixture and uses advised against

- Use of the substance/preparation: For use as an aid in prevention and treatment of ketosis (acetonemia) in dairy cattle.
- Uses advised against: For animal use only. See label cautions.

1.3 Details of the supplier of the safety data sheet

- Name of Manufacturer: ChemSelect, Inc. for Neogen Corporation
- Address of Manufacturer: 944 Nandino Blvd.
  Lexington, Kentucky 40511
  USA
- Telephone: 859/254-1221 • 800/621-8829
- Email: Inform@neogen.com

1.4 Emergency telephone number

- Emergency Telephone: Chemtrec: 1 (800) 424-9300
  Outside USA and Canada: +1 (703) 527-3887

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (29 CFR 1910.1200)

- Not classified as hazardous for supply

Classification (WHMIS 2015 HPR)

- Not classified as hazardous for supply

Additional information: For full text of Hazard statements: see Section 16.

2.2 Label elements

- Signal Word: None
- Symbols: None
- Hazard phrases
  None
- Precautionary Phrases
  Keep container tightly closed.
  Do not breathe dust/mist/vapors/fumes.
  Avoid prolonged contact with eyes, skin, or clothing.

2.3 Other hazards

- Keep out of reach of children.

SECTION 3: Composition/information on ingredients

3.1 Substances

3.2 Mixtures

This product is a mixture of the substances listed below with the addition of non-hazardous materials

Chemical	Concentration	CAS No.	H-Statements	Symbols
Propylene glycol	≥99.5%	57-55-6	None	None

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

SECTION 4 First aid measures

4.1 Description of first aid measures

- General
  In case of doubt, or when symptoms persist, seek medical attention.
  In general, this product is not hazardous to humans or animals, but like any other chemical, it should be treated with care, respect, and common sense.

SECTION 4 First aid measures (continued)

- Contact with skin
  Remove contaminated clothing.
  Wash affected area with plenty of soap and water.
  If skin irritation or rash occurs: Get medical advice/attention.
  Contaminated clothing should be laundered before reuse.
- Contact with eyes
  If substance has gotten into eyes, immediately rinse with plenty of water for at least 15 minutes.
  Irrigate eyes thoroughly while lifting eyelids.
  Seek medical advice if necessary.
- Ingestion
  Not expected to present a significant ingestion hazard under anticipated conditions of normal use.
  Never make an unconscious person vomit or drink fluids.
  If medical advice is needed, have product container or label at hand.
- Inhalation
  If breathing is difficult, remove victim to fresh air and keep comfortable for breathing.
  Call a poison center or doctor/physician if you feel unwell.
  Avoid inhalation of hot vapors or extremely high concentrations of aerosols.

4.2 Most important symptoms and effects, both acute and delayed

- The most important known symptoms are described in the labeling (see Section 2.2) and/or in Section 11.
- High doses may cause CNS depression (fatigue, dizziness and possibly loss of concentration, with collapse, coma, and death in cases of severe over-exposure). Hazards: This product is of low acute toxicity. May cause irritation of the eyes, skin, and mucous membranes. Hot vapors may cause lung damage.

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

- In case of fire: use foam, carbon dioxide or dry agent for extinction.
- Do not use solid water stream.

5.2 Special hazards arising from the substance or mixture

- Smoke from fires is toxic. Take precautions to protect personnel from exposure.
- Heat from fire can generate flammable vapor. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Vapors may be heavier than air. May travel long distances along the ground before igniting and flashing back to vapor source. Fine sprays and mists may be combustible at temperatures below normal flash point. Fight fire from a safe distance, in a protected location. Heat may build enough pressure to rupture closed containers, spreading fire, increasing the risk of burns and injuries. Use water fog for cooling. Avoid frothing steam explosion. Although water soluble, it may not be practical to extinguish fire by water dilution. Notify authorities immediately if liquid enters sewer or public waters. Refer to NFPA Code 13 for guidance in using propylene glycol in sprinkler system applications.
- See Section 10.

5.3 Advice for firefighters

- Keep container(s) exposed to fire cool with water fog.
- Wear chemical protection suit and positive-pressure breathing apparatus, if necessary.
- Wear protective clothing as per Section 8.

5.4 Hazardous Combustion Products

- May produce carbon monoxide

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Shut off all ignition sources.
- Use non-sparking hand tools.
- Remove contaminated clothing.
- Wear protective clothing as per Section 8.
- Wash thoroughly after dealing with spillage.
- Spill surfaces may become slippery.

6.2 Environmental Precautions

- Do not allow to enter public sewers and watercourses.
- Avoid releasing to the environment.

6.3 Methods and material for containment and cleaning up

- Absorb spillage in inert material and shovel up.
- Place in sealable container.
- Seal containers and label them.
- Wash spill site after material pick-up is complete.
- Dispose of contaminated materials and wastes in accordance with local/national/international regulations.

6.4 Reference to other sections

- See Section 7 for storage. For disposal, see Section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Avoid inhalation of concentrated vapors.
- Avoid contact with skin and eyes.
- Do not eat, drink or smoke when using this product.
- Wash hands thoroughly after using this substance.

7.2 Conditions for safe storage, including any incompatibilities

- Store in a cool, dry, well-ventilated storage area.
- Store in original container.
- Keep away from heat and flame.
- Keep lid tightly closed when not in use.
- May degrade when exposed to light or other radiation sources.
- Reacts with strong oxidizing agents, strong acids, and isocyanates.
- Keep out of reach of children.

7.3 Specific end use(s)

- For use as an aid in prevention and treatment of ketosis (acetonemia) in dairy cattle.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- There are no recommended or established controls for this product.

8.2 Exposure controls

- Eyewash bottles should be available.
- Engineering controls should be provided to prevent the need for ventilation.
- No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear a suitable respirator when concentrated mist or vapors are present.
- Wear chemical-resistant rubber gloves to prevent prolonged or repeated skin contact.
- Wear safety glasses or anti-splash goggles according to the concentration and amount of dangerous substance at the specific workplace.
- Wear suitable protective clothing in accordance with good industrial hygiene and safety practices in the event of prolonged exposure to bulk quantities.
- Contaminated clothing should be laundered before reuse.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Clear liquid
- Odor: Non-specific, no fragrance added
- pH: No information available
- Melting Point/Range: <-4°F/-20°C
- Boiling Point/Range: 363°F/184°C at 1003.20 hPa/752.46 mmHg
- Flashpoint: 219°F/104°C at 1000.010 hPa/750.071 mmHg
- Evaporation Rate: No information available
- Flammability: UEL: ~17.4 vol%/LEL: ~2.4 vol%
- Vapor Pressure: 0.2 hPa/0.2mmHg at 77°F/25°C
- Vapor Density: No information available
- Specific Gravity: 1.03 g/cm^3 at 68°F/20°C
- Solubility in water: Completely soluble at 68°F/20°C
- Partition Coefficient (n-Octanol/Water): log P_{OW}: -1.07 at 68.9°F/20.5°C
- Autoignition Temperature: >752°F/400°C at 1000.10-1014.40 hPa/750.14-760.86 mmHg
- Viscosity: 42.1 mm^2/s at 77°F/25°C
- Explosive Properties: Product does not present an explosion hazard
- Oxidizing Properties: This product is not classified as an oxidizer

9.2 Other information

- No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

- Considered stable under recommended storage conditions.

10.2 Chemical stability

- Considered stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

- Keep away from heat and sources of ignition. Keep away from oxidizing conditions.
- May degrade when exposed to light or other radiation sources.

10.5 Incompatible materials

- Strong oxidizers, strong acids, and isocyanates.

10.6 Hazardous Decomposition Products

- Carbon monoxide

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- This product is classified as non-hazardous.
- Oral LD_{50} = 22,000 mg/kg (rat)
- Dermal LD_{50} > 2,000 mg/kg (rabbit)
- Inhalation LC_{50} > 317mg/L-2hr (rabbit)
- Contact with skin
  May cause redness and irritation in sensitive individuals.
- Contact with eyes
  May cause fully reversible redness and irritation in sensitive individuals.
- Ingestion
  Product is not toxic, but may cause irritation of the throat and/or nausea in sensitive individuals.
- Inhalation
  May cause irritation in sensitive individuals. Hot vapors may cause lung damage.

SECTION 11: Toxicological information (continued)

- Carcinogenicity
  Not listed in the National Toxicology Program (NTP) 13th Report on Carcinogens.
  Not found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs, Volumes 1-112.
  Not listed in OSHA standard 1910.1003 Carcinogens.
- Mutagenicity
  No evidence of mutagenic effects.
- Teratogenicity
  No evidence of teratogenic effects.

SECTION 12: Ecological information

12.1 Toxicity
- This product is not classified as hazardous to the environment under U.S. regulations.

12.2 Persistence and degradability
- Rapidly degradable. 72-100% (after 28 days in a ready biodegradability test)

12.3 Bioaccumulation Potential
- This product is not expected to bioaccumulate.

12.4 Mobility in soil
- Surface tension: 71.6mN/m
  1.01 g/l at 21.5°C

12.5 Other Adverse Effects
- On available data, substance is not harmful to the environment.

SECTION 13: Disposal considerations

Waste treatment methods
- Disposal should be in accordance with local, state, national, or international regulations.
- Do not discharge into drains or the environment, dispose to an approved waste disposal facility.
- Do not reuse empty containers.

SECTION 14: Transport information

14.1 UN Number
- Not classified as hazardous for transport

14.2 UN Proper Shipping Name
- Not applicable

14.3 Transport hazard class(es)
- Not applicable

14.4 Packing group
- Not applicable

14.5 Environmental hazards
- Not Classified

14.6 Special precautions for user
- Not Classified

14.7 Domestic Surface Transport (US DOT)
- Proper Shipping Name: Not applicable
- DOT UN No.: Not applicable
- DOT Hazard Class: Not applicable
- DOT Packing Group: Not applicable

SECTION 14: Transport information (continued)

14.8 International Road/Rail (ADR/RID)

- Proper Shipping Name: Not applicable
- ADR UN No.: Not applicable
- ADR Hazard Class: Not applicable
- ADR Packing Group: Not applicable
- Tunnel Code: Not applicable

14.9 Ocean/Sea (IMO/IMDG)

- Proper Shipping Name: Not applicable
- IMDG UN No.: Not applicable
- IMDG Hazard Class: Not applicable
- IMDG Packing Group: Not applicable

14.10 Air (ICAO/IATA)

- Proper Shipping Name: Not applicable
- ICAO UN No.: Not applicable
- ICAO Hazard Class: Not applicable
- ICAO Packing Group: Not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- The labeling requirements of the Federal Food, Drug, and Cosmetic Act differ from the classification criteria and hazard information required for safety data sheets and for workplace labels under the OSHA Hazard Communication Standard 29 CFR 1910.1200. Following is the hazard information as required on the drug label:

  KEEP OUT OF REACH OF CHILDREN
  For animal use only/Not for human use

- NDC: 59051-235-01

15.2 United States Regulatory Information

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
The material does not contain any chemical components with known CAS numbers that exceed the threshold (de minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312
No SARA Hazards

Toxic Substance Control Act (TSCA)
All components of this material are either listed or exempt from listing on the TSCA Inventory.

15.3 Canadian Regulatory Information

- This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR). The labelling may differ subject to the requirements of the Food and Drugs Act (FDA).
- WHMIS Classification: Exempt
- Inventory Status

Domestic Substances List (DSL)	Listed
Non-Domestic Substances List (NDSL)	Not listed

SECTION 16: Other information

Document Number: SDS-9008, Propylene Glycol
Date of Preparation: December 14, 2015
Revision: Rev. 0
Replaces: New issue

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Neogen Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY.

944 Nandino Blvd • Lexington, KY 40511 • 800/621-8829 (USA/Canada) • 859/254-1221
inform@neogen.com • www.neogen.com